



Office of Childhood
Office of Special Education
January 2023

Annual Report on First Steps Infants Identified through the Newborn Hearing Screening Program

Purpose

Under the Newborn Hearing Screening law, RSMo 191.931, the Missouri Department of Elementary and Secondary Education shall “monitor the delivery of early intervention services to those infants identified by the newborn hearing screening program and report annually to the department of health and senior services.” Eligible infants are served by the Missouri First Steps Program under Part C of the Individuals with Disabilities Education Act (IDEA).

This report provides information related to the number of First Steps infants born in 2021 and identified with permanent hearing loss through the newborn hearing screening program.

Infants Enrolled in the First Steps Program

As of November 3, 2022, 127 infants born in 2021 were identified with hearing loss by the Department of Health and Senior Services (DHSS). It is important to note that the 127 infants included infants who received incomplete results or unknown types of loss based on what was reported to DHSS. Infants who were determined to be suffering from middle ear pathology (e.g., fluid in the middle ear from colds, ear infections) and who do not have a permanent hearing loss could be removed from the list at a later date based on updates received from audiologists.

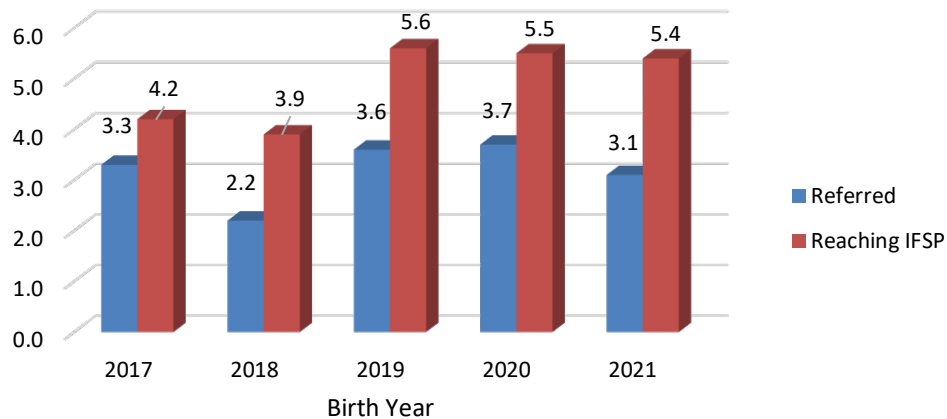
Of the 127 infants identified by DHSS, 104 (81.9%) were referred to the First Steps program. Of the 104 infants referred to First Steps, 84 (80.8%) were found eligible and had an Individualized Family Service Plan (IFSP). The remaining 20 infants did not reach IFSP status due to the following reasons: 16 children were withdrawn by a parent or guardian, and four children were unable to be located.

Of the 84 infants who had an IFSP, 73 (86.9%) were in active status as of November 20, 2022, seven children had been withdrawn by a parent or guardian, three children moved out of state, and one child was unable to be contacted/located.

Average Age at Referral

Table 1 represents the average age in months of infants at the time of referral to First Steps for the 104 children referred. The average age at referral for infants born in 2021 was 3.1 months. The average age at the time of initial IFSP for the 84 infants who reached IFSP was 5.4 months.

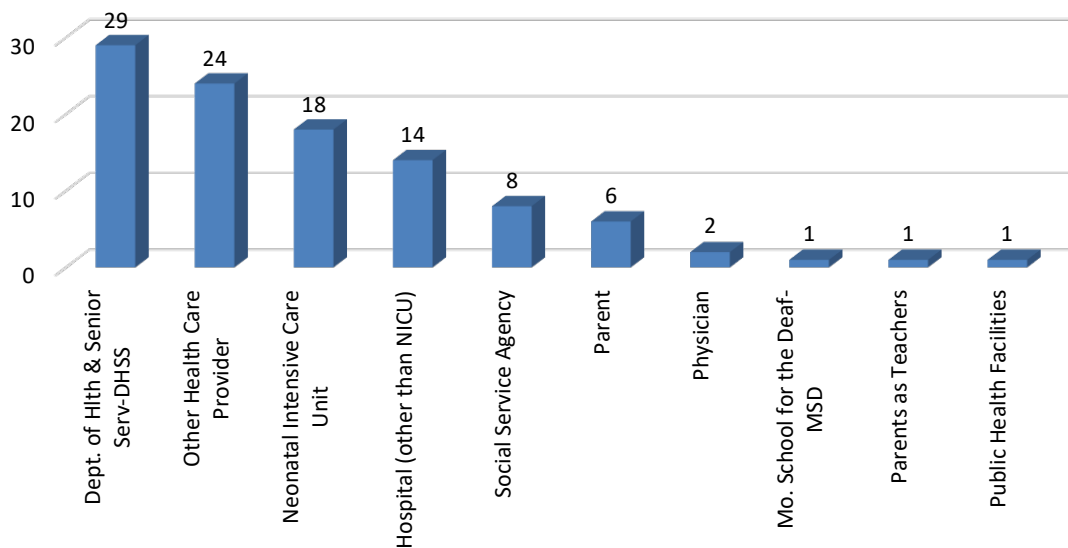
Table 1. Average Age in Months at Referral and Reaching IFSP



Referral Sources

Table 2 represents the sources of initial referrals to First Steps for infants with hearing loss identified by DHSS. Of the 104 infants referred to First Steps, most initial referrals were made by Department of Health and Senior Services (DHSS) with 29 (27.9%), Other Health Care Provider with 24 (23.1%), Neonatal Intensive Care Unit with 18 (17.3%), and Hospital (other than NICU) with 14 (13.5%).

Table 2. First Steps Referral Sources



Eligibility Categories

Table 3 provides the primary First Steps eligibility category for the 84 infants determined eligible for services and reached IFSP. There were 76 children (90.5%) found eligible due to a diagnosed condition.

Table 3. Reasons for Eligibility

Reason for Eligibility	Number of Infants	% Eligibility
Diagnosed Condition	76	90.5%
Developmental Delay - Half age delay	6	7.1%
Newborn Condition	2	2.4%
Total	84	100.0%

Type of Hearing Loss

Table 4 represents the type of hearing loss and related First Steps referral and eligibility percentages for the 127 infants identified by DHSS. Of the 127 infants, 69 (54.3%) had a sensorineural hearing loss. Of the 69 infants with sensorineural hearing loss, 63 (92.1%) were referred to First Steps and, of those referred, 53 (84.1%) reached IFSP.

Table 4. Type of Hearing Loss and First Steps Status

Type of Loss	Number of Infants	Referred to First Steps	Reached IFSP	% Reached IFSP
Sensorineural	69	63	53	84.1%
Unknown Type	25	14	8	57.1%
Conductive	14	13	10	76.9%
Permanent Conductive	10	8	8	100.0%
Auditory Neuropathy	7	4	4	100.0%
Mixed	2	2	1	50.0%
Total	127	104	84	80.8%

Service Authorizations

Table 5 represents the First Steps service authorizations for the 73 infants identified by DHSS who were in active IFSP status as of November 20, 2022. There were 323 active authorizations for the 73 infants with hearing loss. The top three categories of First Steps service authorizations were:

- 1) 122 (37.8%) authorizations for Special Instruction;
- 2) 109 (33.7%) authorizations for Audiology; and
- 3) 37 (11.5%) authorizations for Physical Therapy.

Table 5. First Steps Authorizations

	ABR: Audiometry evoked potential	AT Service	Consultation/ Facilitation with Others	Direct Child Service	Evaluation/ Assessment	Family Education/ Training/Support	OAE limited: Evoked otoacoustic	Tympanometry (impedance testing)	Visual Reinforcement Audiometer	Grand Total	Percentage
Audiology	10	34	0	4	34	3	24	0	0	109	33.7%
Occupational Therapy	0	0	10	18	0	0	0	0	0	28	8.7%
Physical Therapy	0	0	10	27	0	0	0	0	0	37	11.5%
Special Instruction	0	0	26	57	35	4	0	0	0	122	37.8%
Speech Language Pathology	0	0	5	20	0	2	0	0	0	27	8.4%
Grand Total	10	34	51	126	69	9	24	0	0	323	100.0%

* ABR – Auditory Brainstem Response

* AT – Assistive Technology

* OAE – Otoacoustic Emissions